

*This chapter is dedicated to
my daughter, Lindsey.*



Flexibility is a valuable aspect of physical fitness. It's defined as a joint's ability to move freely through its full and normal range of motion (ROM). Good flexibility can help you to improve your daily functional activities and may decrease your risk of injury. Of the major components of physical fitness – aerobic (or cardiorespiratory) endurance, muscular strength and flexibility – flexibility training is the easiest to perform yet often the most ignored.

WHY SHOULD YOU STRETCH?

Why not? The benefits of incorporating a simple stretching regimen into your daily routine are numerous. When performed regularly, a basic stretching routine can increase your range of motion, improve your circulation, increase your overall coordination and muscular balance and increase your efficiency of movement throughout the day. Flexibility also reduces muscle tension which often results from stress. Tight low-back muscles, hamstrings (the muscles on the back of your thighs) and hip flexors (the muscles on the front of your hips) can increase your risk of low-back injury and/or pain. This is especially important when you consider that low-back pain will strike an estimated 80% of Americans in their lifetimes. Studies have indicated that adequate flexibility can reduce

these risks and is especially important for injury prevention. Lastly, stretching can increase your body awareness and mental well-being. Better yet, stretching is relaxing and just feels good!

WHO SHOULD STRETCH?

Anyone who's in good health can and should stretch regardless of age or level of flexibility. Whether you're 5 or 85, stretching is simple to learn and can be performed without any previous knowledge or skills.

WHEN SHOULD YOU STRETCH?

Stretching should be performed whenever possible whether it's morning, noon or night. Avoid stretching cold, tight muscles. Always make an attempt to warm up slightly before you stretch. Gentle movement – such as walking in place for a few minutes or knee lifts – can elevate your core temperature enough to increase the blood flow to your muscles and better prepare them for stretching. Once you're up and moving, take a stretch break in the morning. Stretch 1-2 minutes for every 30 minutes of sitting or whenever your body feels stiff. Stretch after standing for long periods of time. Multi-task: Stretch in the evening when you watch television! Or stretch just before bedtime. The possibilities are endless; you'll be amazed to discover that there's almost always

Chapter 2

Flex Appeal: The Basics of Flexibility

Jeanne Hogan, B.S., C.S.C.S.
Personal Trainer
Pennington, New Jersey





an opportunity for a stretch break! And always try to stretch before and after exercising.

- **Be careful not to stretch to the point where it's painful or the tension increases. If so, you're overstretching. In this case, reduce the tension or stop the stretch.**

A Simple Stretch

When performed regularly, a basic stretching routine can increase your range of motion, improve your circulation, increase your overall coordination and muscular balance and increase your efficiency of movement throughout the day.

HOW DO I STRETCH?

The stretches presented here are performed using a technique called “static stretching.” This involves a slow, gradual, controlled and sustained stretch with focus on achieving your full ROM. Here are some general guidelines for proper stretching:

- **Ease into the stretch gently to the point of gentle tension, not pain.**
- **Hold the position for about 15-30 seconds until the feeling of tension begins to diminish.**
- **Ease off gently into a more comfortable stretch if the tension doesn't subside.**
- **Avoid bouncing at any time during the stretch. Bouncing through the stretch may invoke a stretch reflex and increase the risk of injury.**
- **Breathe naturally through the stretch. Exhale as you ease into the stretch. You may want to count softly through the stretch to insure proper breathing. Don't hold your breath.**
- **Move gently into a greater stretch until you feel slight tension. Again, hold this greater stretch for about 15-30 seconds.**

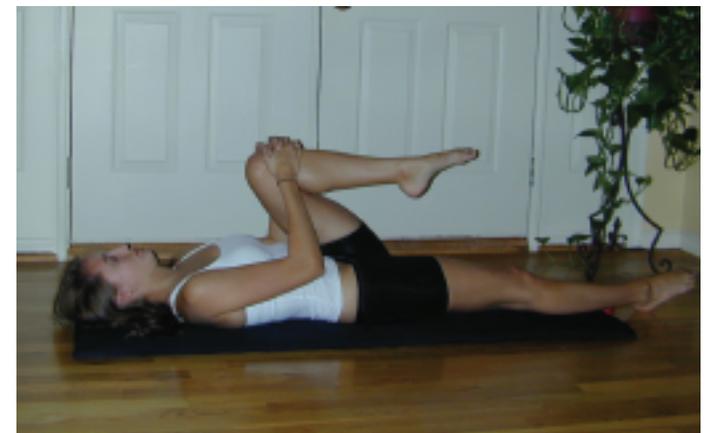
THE STRETCHES

There's no optimal program for stretching your muscles. However, the 10 stretching movements that are forthcoming will allow you to stretch all of your major muscles in a safe and comprehensive manner.

KNEE PULL

Muscles stretched: lower back, buttocks and hamstrings

- **Lie on your back on the floor.**
- **Straighten both legs slowly and relax.**



KNEE PULL

- Pull your right knee toward your chest gently with both hands.
- Keep your head down on the floor.
- Breathe naturally and hold the stretch.
- Release your right leg and then repeat the stretch with your left leg.
- If you can perform this exercise without moderate tension and remain comfortable throughout the stretch, pull both knees together into your chest gently and hold.
- Straighten both legs to their original position.

SEATED REACH

Muscles stretched: lower back, buttocks, hamstrings and calves

- Assume a seated position on the floor.
- Relax, straighten your legs and place your



SEATED REACH

feet approximately hip-width apart.

- Bend from your hips and reach forward to your shins or toes.
- Focus on bending your hips, not rolling your lower back.
- If you're able to reach your toes, flex your ankles gently to add the calves into the stretch.
- This stretch is a great addition or alternative to the knee pull.

KNEE OVER

Muscles stretched: lower back, outer hip and buttocks

- Pull your right knee gently toward your chest with your left hand.
- Extend your right hand and arm on the floor at shoulder height.
- Pull your right leg across your body at waist height.
- Think of pulling your knee gently toward your left shoulder.
- Press your knee toward the floor until you reach the point of gentle tension.
- Turn your head and look at your right hand to maximize the stretch through your hip.
- Release your right knee and then repeat the stretch with your left leg.



KNEE OVER



INNER THIGH STRETCH/BUTTERFLY

INNER THIGH STRETCH/BUTTERFLY

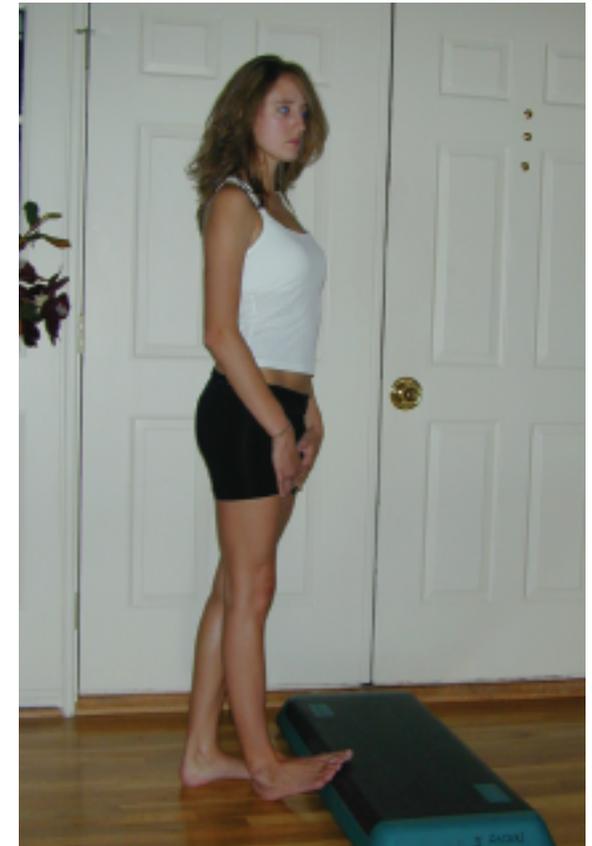
Muscles stretched: adductors

- **Assume a seated position on the floor.**
- **Place the soles of your feet together in front of you and use your hands to hold your feet.**
- **Spread your knees as far as they'll go comfortably.**
- **“Walk” your buttocks on the floor toward your feet until you feel gentle tension in your inner thigh and groin area.**
- **After the stretch, roll over onto your hands and knees and up into a standing position to prepare for the next stretch.**

CALF STRETCH

Muscles stretched: calves and hamstrings

- **Place the toes of your left foot on an elevated object such as a step.**
- **Keep your body upright and don't “lock” your knee.**
- **Lean forward slowly to the point where your torso is over your toes.**
- **Resist the urge to lock your knee.**
- **Repeat the stretch with your right leg.**



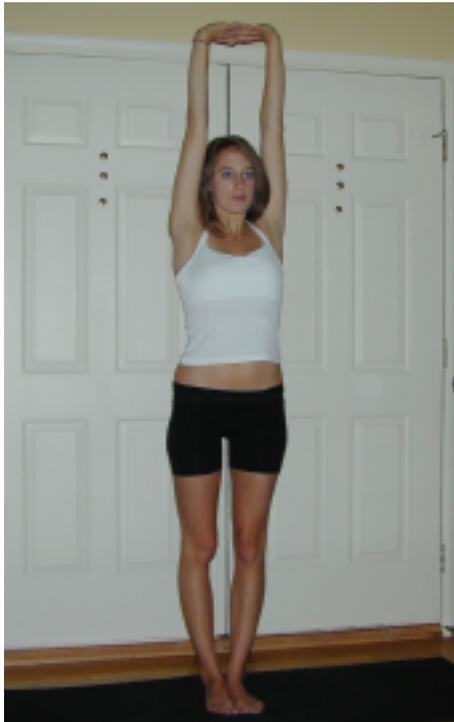
CALF STRETCH

OVERHEAD ARM REACH

Muscles stretched: chest, upper back and shoulders

- **Interlace your fingers above your head with your palms facing up.**
- **While reaching up, move your arms back gently until you feel slight tension in your chest, upper back and shoulders.**
- **Breathe naturally and rhythmically.**

* This is a great stretch for when you feel stiff or have been sitting for a long time.



OVERHEAD ARM REACH

TRICEP STRETCH

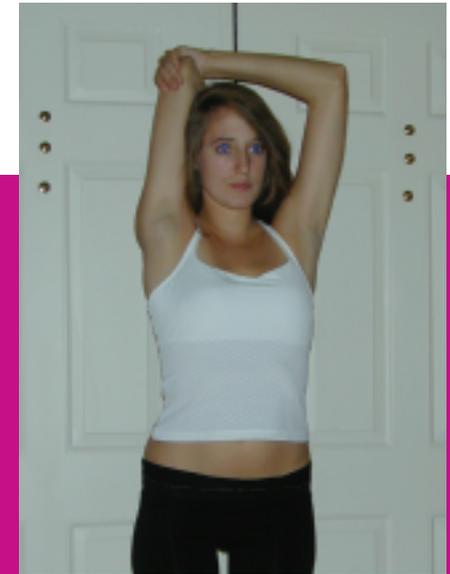
Muscles stretched: triceps and shoulders

- **From the overhead arm reach (the previous stretch), bend your right arm and drop your right hand behind your back.**
- **Grasp your right elbow with your left hand and pull your arm gently and slightly farther behind your back.**
- **Hold the stretch then repeat with your left arm.**
- **Return to the overhead arm reach before moving to the next stretch.**

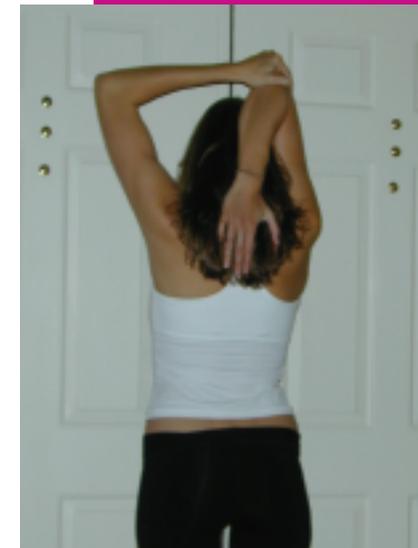
FRONT ARM REACH

Muscles stretched: upper back, shoulders and arms

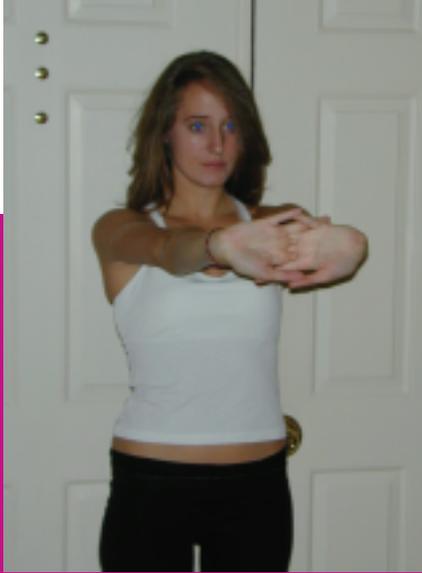
- **From the tricep stretch (the previous stretch), bring your arms down in front of you until they're at shoulder height.**
- **Push your palms out gently and hold the stretch.**
- **Release your arms to your sides.**



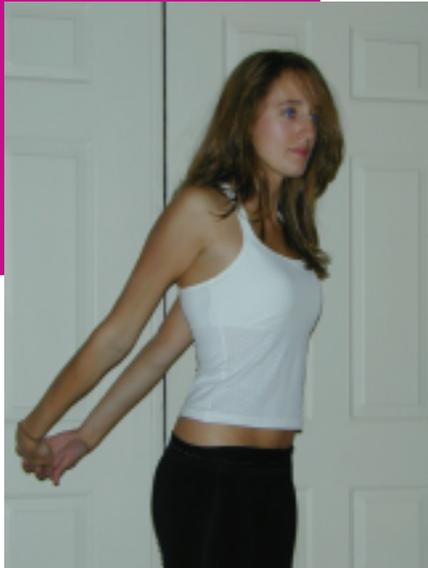
TRICEP STRETCH-front view



TRICEP STRETCH-rear view



FRONT ARM REACH



REAR ARM REACH

REAR ARM REACH

Muscles stretched: chest, shoulders and arms

- **Reach behind you with both arms and clasp your hands together.**
- **Lift your arms gently until your elbows roll slightly inward.**
- **Lift your arms until you feel tension in your chest and shoulders.**
- **Hold this position and then lower your arms slightly.**
- **This is another great stretch for when you feel stiff or have been sitting for a long time.**

NECK AND SHOULDER PULL

Muscles stretched: neck and shoulders

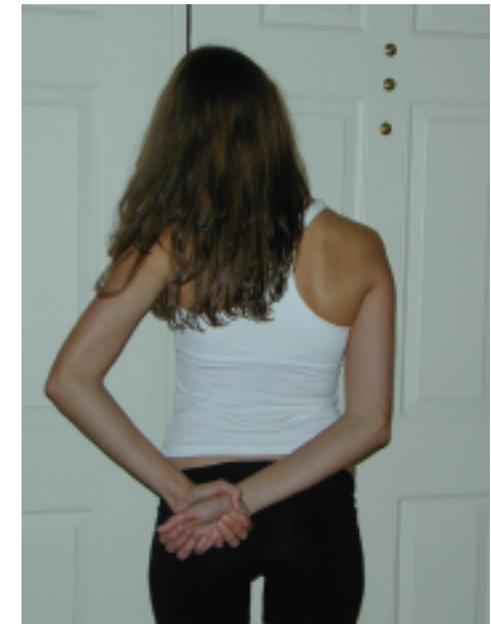
- **From the rear arm reach (the previous stretch) with your arms behind your back, pull your right hand and arm down and across your back gently with your left hand.**
- **Lower your left ear toward your left shoulder slowly and simultaneously**
- **Hold this position and then repeat the stretch with your right side.**

REFERENCES

Anderson, R. A., and J. E. Anderson. 1980. Stretching. Bolinas, CA: Shelter Publications, Inc.

Eastman, R. 1990. Full circle fitness. New York, NY: William Morrow and Company, Inc.

Nieman, D. C. 1993. Fitness and your health. Palo Alto, CA: Bull Publishing Company.



NECK AND SHOULDER PULL

